United States
Environmental Protection
Agency

Region 10
1200 Sixth Avenue
Seattle WA 98101

Alaska
Idaho
Oregon
Washington

13.1

EPA

JUL 6 1990

Governor Cecil D. Andrus
Office of the Governor
State Capitol
Boise, Idaho 83702

Dear Governor Andrus:

I am very concerned about last week's press reports that suggest that the State of Idaho is now discounting the risks of phosphorus slag to the citizens of Pocatello and Soda Springs.

I believe that the scientific evidence underlying EPA's study of radionuclides in southeastern Idaho is quite substantial. If we failed to act in light of the evidence of risk that confronts us, we would be remiss in our responsibilities. I ask for your personal help and cooperation in tackling this very important problem together with EPA.

EPA's position on this problem rests on three critical points:

1. **Low levels of ionizing radiation cause a significant risk of cancer.** The National Academy of Sciences is the nation's scientific authority on this question. They have developed factors ("cancer potency factors") that they recommend be used to estimate the risk of cancer from low levels of radiation (such as the levels of radiation found in Pocatello and Soda Springs). EPA used these National Academy factors in estimating the cancer risks from phosphorus slag. While there will always be some uncertainty about the absolute risks of low level radiation, the National Academy has concluded that there is at most a five percent chance that there is no risk of cancer at these low levels of radiation.

   As with any scientific question, it is always possible to find some dissent, and Monsanto has found some scientists who emphasize the lack of direct evidence of harm from low level radiation. Their apparent lack of concern about low level radiation places them well outside the mainstream of health physics and public health decisions concerning radiation protection. We believe that it would be irresponsible for EPA or any other public health agency to ignore the consensus opinion of the scientific community: low levels of radiation can cause cancer, and should be avoided.

~~62397~~

13.1

2. **Citizens in Pocatello and Soda Springs are exposed to low level radiation from phosphorus slag.** EPA's Idaho Radionuclide Study is the most comprehensive study ever done of radiation exposure from the phosphorus industry in southeastern Idaho. The design of the study was reviewed by EPA's Science Advisory Board before the study began. The study itself included extensive measurements of radiation fields around the phosphorus slag, and mapping of the extent of slag distribution. The evidence is very clear that people are being exposed to radiation from this slag. Neither Monsanto nor FMC has presented any contrary evidence to EPA.

3. **The levels of radiation from phosphorus slag in Pocatello and Soda Springs are serious compared to other radiation problems.** National and international guidance for radiation protection limit exposure to a member of the general public to 100 millirem per year from all man-caused sources. EPA's estimates suggest that some people living in southeastern Idaho may be exposed to radiation levels at twice this limit, just from the phosphorus slag.

   Fortunately, not everyone in southeastern Idaho is exposed to levels this high. EPA estimates the average exposure from slag to a Soda Springs resident to be 52 mrem per year. But these levels are still quite high compared to other radiation problems that have caused concern. For example, the maximum level of air emissions allowed from nuclear reactors is 10 mrem per year to nearby residents. Atmospheric testing of nuclear weapons prompted concerns about risks at radiation exposure levels below the typical levels in Pocatello and Soda Springs. The exposure limit for residents near the Idaho Nuclear Engineering Laboratory is limited to 10 mrem per year, far below the radiation levels from the phosphorus slag.

I want you to know that I share your concern about the effects of EPA's study on the citizens of southeastern Idaho. It is very difficult for citizens to deal with government scientists who have descended on them to announce that familiar materials may be causing them harm. Our society once used lead extensively in paint and in gasoline, but we no longer do so, because we have found that it is harmful. We once used asbestos extensively for insulation, PCBs for electrical oils, and various chemicals for treating wood, but we have changed our practices in all these cases. In each case, the industry initally protested that the science did not warrant action. The average citizen was left wondering who to believe, and what the effects of the news might be on his own health, his own property, and his property values.

EPA believes that the scientific evidence for radiation risks in Southeastern Idaho is clear and convincing. I ask you to join us in restricting the use of phosphorus slag in southeaster Idaho, and to begin the task of reducing radiation exposures in those communities. We must not delay this effort with a debate over whether radiation causes cancer, as some in the industry would have us do.

I understand that FMC and Monsanto have stopped selling slag for construction purposes, at least temporarily, We must work together to ensure that this restriction becomes permanent. I particularly want to commend you for your decision to no longer use this slag in state-funded construction or highway projects.

The next important step is to decide what needs to be done to reduce risks from the slag that is already out there. We need to undertake an exposure survey of individual homes in Soda Spring, and we need to work with leaders in both communities to identify a long-term strategy for road repair.

It is especially important that we begin the home survey soon, since people whose homes have foundations made from the slag have the highest radiation exposures, A house-to-house survey will give us very specific information about radiation exposures and about where corrective action may be needed. I ask for you personal support for the Soda Springs home survey.

I also want to assure you that EPA is particularly concerned about being open and responsive to the people of southeastern Idaho. We have met with community leaders and industry since the study was first proposed. We intend to continue to share our information with them, and to listen to their concerns. Communicating with the public about risks of this sort is an important and difficult task for both EPA and the State. I hope we can work together on this as well.

Sincerely,

Thomas P. Dunne

Thomas P. Dunne
Acting Regional Administrator